316
327

Table 1. Iron and Steel Production in Southwest China

Year	Iron Ore		Pig Iron		Steel
	Province*	Free China#	Province*	Free China×	Free China#
1934		Unknown		Unknown	Unknown
Szechwan	60,000		20,000		
Kweichow	300		75		
Yunnan	1,500		500		
Total	61,800		20,575		
1939	Unknown	41,466	Unknown	Unknown	12,000
1940		55,182			1,500
1941		62,836			2,011
1942		77,497			3,000
1943		70,000			6,800
1944		40,134			13,361

* Chinese Yearbook, 1944-1945, p. 656.

Statistical Abstract of the Republic of China, 1947, pp. 28-29.

× China Handbook, 1937-1945, p. 391.

1:Stanford U. S-4, 5 1956 AF16 SW China
AF16

1:Stanford U. S-4, 5 1956 AF16 SW China
AF4 AF16

316 1. Iron Ore. Before World War II, virtually all of the iron ore produced in the southwestern provinces came from antiquated native mines. It has been estimated that in 1934 the native mines in Szechwan produced about 60,000 metric tons of iron ore, those in Yunnan about 1,500 tons, and those in Kweichow about 300 tons.[3] The output in Szechwan Province was surpassed only by that of Shansi Province in the North China Region, where, if the production of modern mines is excluded, the greatest amount of iron ore in China is mined. During the prewar years, Central China and Manchuria were the only regions where large-scale modern iron and steel plants were in operation.

327 2. Pig Iron. In 1934, the pig iron production of Szechwan amounted to 20,000 metric tons, that of Yunnan to 500 metric tons, and that of Kweichow to 75 metric tons. During the war years, plant facilities in the southwestern provinces were modernized, and pig iron production (largely in Szechwan) rose to approximately 30,000 metric tons

3. The Council of International Affairs (Chungking), The Chinese Yearbook, 1944-1945, Shanghai, Chicago Daily Tribune Publishing Co., 1946, p. 656; Statistical Abstract of the Republic of China, 1947, Nanking, Directorate General of Budgets, Accounts and Statistics, Executive Yuan, 1948, pp. 28-29.

1:Stanford U. S-4, 5 1956 AF16 SW China
AF16

in 1942 and 32,800 metric tons in 1943. (See Table 1).

3. Steel. Available statistics indicate that in the prewar years Southwest China produced an average of 1,200-1,500 metric tons of steel. In 1942, the output increased to 3,800 metric tons, and in 1943 exceeded 9,000 tons. Government-operated steel mills had been expanded under the control of the National Resources Commission, and some privately owned mills in the region had participated in the growth. The following table shows the respective growth of facilities for iron and steel production in China as a whole in the period 1942-43.

1:Stanford U, S-4, 5 1956 AF16 SW China AF16

Table 2. Production of Iron and Steel*

Ownership	Pig Iron 1942	Pig Iron 1943	Steel 1942	Steel 1943
Government-owned	14,032	23,617	1,516	4,499
Privately owned	15,983	9,200	2,300	4,548
Total	30,015	32,817	3,816	9,047

* China Handbook, 1937-1945, p. 391. Although the figures in this table do not tally with those reported in the Chinese Yearbook, 1944-1945 and the Statistical Abstract of the Republic of China, 1947, used as sources for Table 1, they may offer some idea of the proportionate increase in privately owned and government-owned mills.

1:Stanford U. S-4, 5 1956 AF16 SW China
AF16

327 Despite expansion, the absolute gain in steel production in these provinces remains insignificant in comparison with the growth of production in Manchuria. There are no figures available on iron and steel production in Southwest China since 1946, but any substantial expansion is unlikely. Plants in the Southwest Region are less efficiently operated and less favorably located than plants in other regions, and it seems probable that the Communists have concentrated upon the expansion of the best of the plants rather than those hastily constructed during the war years.

Comprehensive information on industrial production in Southwest China under the Communist regime is not available. However, the Communist press announced in 1954 that the capacity of the iron and steel works at Chungking had been increased from 15,000 metric tons in 1949 to 89,000 metric tons in 1952.[4] The Communists also reported that two new open-hearth furnaces, with scales second only to those of the Anshan Steel Works in Manchuria, began trial operations in 1954, and an existing furnace was to be repaired the same year. The Chungking mill turns out both

4. The New China News Agency, Chungking, October 2, 1954.

1:Stanford U, S-4, 5 1956 AF16 SW China
AF16

327 standard and narrow gauge rails for the construction and repair of railroads in the Southwest Region.

C. Production of Coal

316
135 In terms of the coal resources of the entire country, reserves and production in Southwest China are small (See Table 3).

S: Davies G-5 (1894-1900) 1909 AF16 Southwest China AF16

186 generals and admirals looking about for an excuse for their defeat, described our men-of-war as "sea devils," against whom it was impossible for mortal men to contend.

631 I slept at Shun-chiang, a village of 200 houses, which is perhaps the principal place in Hsi-lien. This district consists of a plain or plateau about 23 miles long running from north to south at an elevation which averages 6000 feet. The northern half runs down the 133 Ku-tung Ho, and is from one to three miles wide. This river then turns off eastward to join the Shweli, and the southern part of Hsi-lien is a plateau with little tributaries of the Ku-tung Ho or of the Shweli, crossing it from [241] west to east. Along these little streams are irrigated fields, so that in going up the plateau from south to north one crosses alternately small rice plains and bits of higher-lying uncultivated ground, covered with rocks and bushes.

The hills all round are fairly well clothed with forest, chiefly of fir trees. The range to the west rises to 9,500 feet, but that to the east is lower, with gaps through it by [342] which the streams reach the Shweli[1]. The abundance of [313] timber is shown by the fact that all the houses are built of wood instead of the usual soft brick. The district is decidedly a prosperous one and contributes to the volume of trade to be got out of T'êng-yüeh. Fruit-growing and sheep-rearing could be carried on very successfully here.

From Shun-chiang we went on by two easy marches to Ma-li-pa, a village in the small district of T'ien-t'ang-kuan which lies at the head of the Ku-tung Ho. Here we found shelter for mules as well as men in a water-tight but very [622] draughty temple. The district is governed by an hereditary Chinese chief, and is of no importance except for its iron 316 mine. This has been worked chiefly by surface-diggings, but in two places there are deeper shafts, the earth being propped up by logs of wood placed close together and supported by posts. One of these goes down forty or fifty feet.

• 327 The ore is smelted near the village, and the bellows of [376] the furnace, as at Wan-yao, are worked by a water-wheel. The softer iron is used for the manufacture of pans, but

[1] Some of these streams run into holes in this range.

& Davies G-5 (1894-1900) 1909 AF16 Southwest China AF16

327 when hardened by repeated heatings in the furnace it is made into hatchets, hoes, and tripod stands for cooking-pots.

563 To the north of T'ien-t'ang-kuan is a very interesting country inhabited by the Li-so tribe, which I should much have liked to explore. This race I have found scattered over a very wide extent of country, as far south as the Siamese border, and as far north as the Tibetan parts of Ssŭ-ch'uan and north-western Yün-nan. In the Kachin Hills and the Shan States they are split up into very small and scattered communities, living usually on the very tops of the hills. They originally occupied a good deal of the country to the west and north of T'êng-yüeh, and I have little doubt that the Chinamen of Hsi-lien and many of the neighbouring districts have more Li-so blood in them than Chinese. At present the only district in which the Li-sos form the bulk of the population seems to be the Salween valley from about Lat. 25° 30′ up to Lat. 27° 30′. Their language is closely connected with that of the Lo-los, and they are no doubt a branch of this widely-spread race. I have always found them, like the Lo-los, extremely pleasant and friendly.

Li-so is the Chinese name for this tribe. They call themselves Li-su, and the Kachins know them as Yaw-yen. In T'ien t'ang-kuan they now live on very good terms with their Chinese neighbours, but the remains of a wall round Ma-li-pa and an old two-storied stone tower close by suggest that there was a time when things were not so peaceful. Now-a-days the only enemies of the villagers are wolves, which they say hunt in large packs and will kill even big animals, such as ponies and cattle.

From Ma-li-pa I turned eastward, crossed a range at 8,700 feet by an extremely steep ascent and an equally abrupt descent, rendered more difficult by a drizzling rain. This brought us into the Ming-kuang plain which runs down the Mo-lo Ho in a valley half a mile wide.

328 [316] We slept at the village of Hsiao-hsin-kai, and I found men smelting lead close by. The lead is found in sand and this sand is first washed in a place prepared for the purpose in a small stream. The heaviest part of it which sinks is then taken away and smelted in the furnace. Both lead and